

**REMARKS**

Entry of the foregoing amendments prior to examination is respectfully requested.

Respectfully submitted,

*Michael M. Shuman*

By

*Reg No. 34,717*

*for*

Bernhard D. Saxe  
Attorney for Applicant  
Registration No. 28,665

Date June 25, 2001

FOLEY & LARDNER  
Washington Harbour  
3000 K Street, N.W., Suite 500  
Washington, D.C. 20007-5109  
Telephone: (202) 672-5426  
Facsimile: (202) 672-5399

00669455-400404  
T07007-55789360

**VERSIONS WITH MARKINGS TO SHOW CHANGES MADE**

1. (Amended) An amino acid sequence comprising any one of the amino acid sequences presented as SEQ ID No. 7, SEQ ID No. 9 or SEQ ID No. 11 [**or a variant, homologue or fragment thereof**].
  
3. (Amended) A nucleotide sequence selected from:
  - (a) a nucleotide sequence comprising any one of the nucleotide sequences presented as SEQ ID No. 8, SEQ ID No. 10 or SEQ ID No. 12 [**or a variant, homologue or fragment thereof**]; and
  - (b) any one of the nucleotide sequences presented as SEQ ID No. 8, SEQ ID No. 10 or SEQ ID No. 12, or the complement thereof [;] .
  - [(c) a nucleotide sequence capable of hybridising any one of the nucleotide sequences presented as SEQ ID No. 8, SEQ ID No. 10, or SEQ ID No. 12, or a fragment thereof;
  - (d) a nucleotide sequence capable of hybridising to the complement any one of the nucleotide sequences presented as SEQ ID No. 8, SEQ ID No. 10 or SEQ ID No. 12, or a fragment thereof; and
  - (e) a nucleotide sequence which is degenerate as a result of the genetic code to the nucleotide defined in (a), (b), (c), or (d).]
  
4. (Amended) A nucleotide sequence according to claim 2 [**or claim 3**] operably linked to a promoter.
  
5. (Amended) A vector comprising the nucleotide sequence according to [**any one of claims 2 to 4**] claim 2.
  
6. (Amended) A transformed host cell comprising the nucleotide sequence according to [**any one of claims 2 to 5**] claim 2.

7. (Amended) A host cell comprising the nucleotide sequence according to **[any one of claims 2 to 5] claim 2**, wherein the nucleotide sequence is heterologous to the genome of the cell.

8. (Amended) A process of preparing an amino acid **[according to claim 1]**, comprising expressing an appropriate nucleotide sequence according to **[any one of claims 2 to 4] claim 2**.

21. (Amended) An endo- $\beta$ -1,4-xylanase inhibitor obtainable from wheat flour[.]; **wherein the inhibitor has a molecular weight of about 40 kDa (as measured by MS or SDS PAGE); wherein the inhibitor has a pI of about 8 to about 9.5; wherein the inhibitor comprises one or more of the amino acid sequences presented as SEQ ID No. 13, SEQ ID No. 14, SEQ ID No 15, SEQ ID No. 16, SEQ ID No. 17, SEQ ID No. 18 and/or SEQ ID No. 19 in an isolated form.**

26. (Amended) A method for determining the degree of resistance of a xylanase to a xylanase inhibitor, wherein the method comprises:

(a) contacting a xylanase of interest with an inhibitor as defined in **[any one of the preceding claims] claim 21**; and

(b) determining the extent to which the inhibitor inhibits (if at all) the activity of the xylanase of interest.

28. (Amended) A foodstuff comprising a xylanase according to claim 27[, preferably wherein the foodstuff is a bakery product].

31. (Amended) A method for identifying a bacterial xylanase or mutant thereof suitable for use in the preparation of a baked foodstuff, the method comprising:

(a) incorporating a bacterial xylanase of interest in a dough mixture; and

(b) determining the stickiness of the resultant dough mixture;  
such that the bacterial xylanase or mutant thereof is suitable for use in the preparation of a baked foodstuff if the resultant dough mixture has a stickiness that is less than a similar dough mixture comprising a fungal xylanase[.] ;

**wherein said thickness is determinable by the Stickiness Determination Method presented as Protocol 2 herein.**

32. (Amended) A foodstuff comprising a suitable bacterial xylanase or mutant thereof identified by a method according to claim 31 **[preferably wherein the foodstuff is a bakery product]**.

33. (Amended) A process comprising the steps of:

- (a) performing a method according to claim **[32] 31**;
- (b) identifying one or more xylanases suitable for use in the preparation of a baked foodstuff;
- (c) preparing a quantity of those one or more identified xylanases.

34. (Amended) A process comprising the steps of:

- (a) performing a method according to claim **[32] 31**;
- (b) identifying one or more xylanases suitable for use in the preparation of a baked foodstuff; and
- (c) preparing a dough comprising the one or more identified xylanases.

41. A method comprising:

- (a) determining the amount of inhibitor according to **[any one of claims 21 to 24] claim 21** in a wheat flour, which wheat flour may be wheat flour *per se* or may be present in a medium comprising same;

- (b) selecting a suitable xylanase for addition to the wheat flour and/or selecting a suitable amount of a xylanase for addition to the wheat flour; and
- (c) adding the suitable xylanase and/or suitable amount of the xylanase to the wheat flour.

0966455-400404